

WHAT IS CLAIMED IS:

- 1                   1.       A collapsible stand for a bench-top power tool, the stand  
2       comprising:
  - 3                   a first structural member having a top end pivotally connected to a  
4       base of a power tool at a first end of a lower peripheral region of the base, an  
5       intermediate region and a bottom distal end defining at least one foot to rest on an  
6       underlying support surface;
  - 7                   a second structural member having a top end pivotally and slidably  
8       connected to the lower peripheral region of the base of the power tool, an  
9       intermediate region pivotally connected to the first structural member intermediate  
10      region, and a bottom distal end defining at least one foot to rest on the underlying  
11      support surface;
  - 12                  a locking mechanism mounted to the stand or the power tool base for  
13      maintaining a collapsed orientation of the stand relative to the power tool base; and  
14                  a pair of wheels rotatably connected to the base proximate to the first  
15      end of the first structural member;
  - 16                  wherein an expanded orientation of the stand defined by the second  
17      structural member top end being oriented proximate to a second end of the lower  
18      peripheral region of the base, and being spaced apart from the first structural  
19      member top end and the second structural member bottom end being spaced apart  
20      from the first structural member bottom end to provide stable support to the power  
21      tool, and the second structural member converges towards the first structural  
22      member in a collapsed orientation of the stand whereby the second structural  
23      member top end is slid towards the first structural member top end and the second  
24      structural member pivots relative to the first structural member about the pivotal  
25      connection of the intermediate region whereby the second structural member bottom  
26      end is translated towards the first structural member bottom end for providing a  
27      compact collapsed stand that is locked relative to the power tool base by the locking  
28      member and utilized by a user for transporting the power tool and stand upon the  
29      pair of wheels.

1                   2.     The stand of claim 1 wherein the length of the first structural  
2 member and the length of the second structural member are sufficient to provide a  
3 foot plan of the stand in the expanded orientation that exceeds a foot plan of the  
4 power tool base for providing stable footing of the power tool relative to the  
5 underlying support surface.

1                   3.     The stand of claim 1 further comprising at least one track  
2 formed within the base of the power tool, the track being oriented generally  
3 perpendicular to an axis about which the first structural member pivots; and  
4                   a sliding member pivotally attached to the second structural member  
5 and slidably engaged to the track for limited translation of the second structural  
6 member top end relative to the track.

1                   4.     The stand of claim 1 wherein at least one of the first and  
2 second structural members is further defined as a pair of spaced apart tubular legs.

1                   5.     The stand of claim 1 further comprising a handle formed on  
2 at least one of the first and second structural members to be grasped by the user.

1                   6.     The stand of claim 1 further comprising a pair of pads  
2 mounted to the power tool or power tool base spaced apart from the pair of wheels  
3 and generally lying in a plane that intersects the wheels and is perpendicular to the  
4 lower peripheral region of the power tool base, for permitting the stand and power  
5 tool to be supported collectively by the pair of wheels and the pair of pads in a tilted  
6 orientation of the power tool for supporting the power tool and stand as the stand is  
7 expanded or collapsed.

1                   7.     The stand of claim 1 wherein the bench-top power tool is  
2 further defined as a portable table saw.

1                   8.     The stand of claim 1 further comprising a frame structure  
2 including a pair of generally longitudinal members having first and second ends and  
3 being interconnected by at least one transverse member, the frame being affixed to

4 the lower peripheral region of the power tool base in an orientation relative thereto  
5 wherein the longitudinal member first ends are oriented proximate to the first  
6 structural member top end and the longitudinal member second ends are oriented  
7 proximate to the second structural member top end in the expanded orientation of  
8 the stand, each of the pair of longitudinal members having a channel formed therein;  
9 and

10 a pair of sliding members, each slidably received within the channel  
11 for limited longitudinal translation therealong;

12 wherein the first structural member top end is pivotally connected to  
13 the frame first end, and the second structural member top end is pivotally connected  
14 to the pair of sliding members.

1 9. The stand of claim 8 wherein the frame provides an area  
2 contact with the power tool base lower peripheral region.

1 10. The stand of claim 8 wherein the frame is generally  
2 rectangular, and the at least one transverse member is further defined as a pair of  
3 opposed transverse members.

1 11. The stand of claim 10 wherein one of the pair of transverse  
2 members interconnects the longitudinal member second ends and has a slot formed  
3 therein, sized to receive the second structural member in the collapsed orientation  
4 of the stand.

1 12. The stand of claim 8 wherein the first structural further  
2 comprises a pair of tubular legs oriented outboard of the frame and the second  
3 structural member.

1 13. The stand of claim 12 wherein each of the pair of wheels is  
2 pivotally connected to an axle extending through the frame and the associated leg of  
3 the first structural member.

1                   14.     The stand of claim 12 wherein the pair of channels formed in  
2     the frame face inboard; and  
3                   wherein the second structural member further comprises a pair of legs  
4     mounted inboard of the frame, each leg being pivotally connected to the associated  
5     sliding member and the associated leg of the first structural member.

1                   15.     The stand of claim 14 further comprising a pair of pivot bolts,  
2     each pivot bolt being mounted to one of the first structural member legs and the  
3     associated second structural member leg for providing the pivotal connection  
4     therebetween and spacing the legs apart from each other;  
5                   wherein the frame includes a pair of slots, each formed within one of  
6     the longitudinal members, for receiving the pivot bolt in the collapsed orientation  
7     of the stand.

1                   16.     The stand of claim 14 further comprising a lateral cross  
2     member interconnecting the pair of second structural member legs at the top end  
3     thereof.

1                   17.     The stand of claim 16 further comprising another lateral cross  
2     member interconnecting the pair of second structural member legs at an intermediate  
3     region thereof.

1                   18.     The stand of claim 17 wherein the distance between the pair  
2     of lateral cross members is generally equidistant to the internal longitudinal  
3     dimension of the frame.

1                   19.     The stand of claim 18 wherein the locking mechanism is  
2     further defined as a spring loaded latch for receiving one of the lateral cross  
3     members and latching it relative thereto for locking the stand in the collapsed or  
4     expanded orientation.

1                   20.     A method for collapsing and subsequently expanding a stand  
2     for a bench-top power tool, the method comprising the steps of:

3                   tilting the power tool onto a side thereof so that the expanded stand  
4 extends laterally outward;  
5                   translating a slidable structural member to an orientation generally  
6 parallel to that of a pivotal structural member that is pivotally connected to a frame  
7 of the stand that is mounted in a base of the power tool and the pivotal structural  
8 member is pivotally connected to the slidable structural member;  
9                   pivoting the slidable and pivotal structural members to an orientation  
10 parallel with the frame;  
11                  latching one of the slidable and pivotal structural members to the  
12 frame in a collapsed position of the stand;  
13                  resting the power tool on a side thereof so that the collapsed stand  
14 extends generally upward;  
15                  unlatching the slidable structural member of the stand from a latch  
16 that locks the sliding structural member in a fixed orientation relative to the frame;  
17                  pivoting the slidable structural member and the pivotal structural  
18 member to an orientation that is non-parallel with the frame; and  
19                  translating the slidable structural member to an orientation generally  
20 divergent to that of the pivotal structural member in an expanded position of the  
21 stand.

1                   21.     The method of claim 20 further comprising the step of:  
2                   latching one of the slidable and pivotal structural members to the  
3 frame in the expanded position of the stand.

1                   22.     A portable bench-top power tool assembly comprising:  
2                   a power tool having an upper region for performing a powered  
3 operation and having a base with a lower peripheral region;  
4                   a rectangular frame mounted in the base lower peripheral region, the  
5 frame including a pair of longitudinal members and a pair of transverse members,  
6 each of the longitudinal members having a first end and a second end and each of  
7 the longitudinal members including an inboard facing channel formed therein;  
8                   a sliding member received within in each channel;

9                   a first pair of legs, each having a top end displaced outboard of the  
10 frame and pivotally connected to the first longitudinal end of the frame, an  
11 intermediate region and a bottom distal end defining a foot to rest on an underlying  
12 support surface;  
13                   a second pair of legs, each having a top end disposed inboard of the  
14 frame and pivotally connected to one of the sliding members, an intermediate region  
15 pivotally connected to the associated first leg, and a bottom distal end defining a to  
16 rest on the underlying support surface;  
17                   a latching mechanism mounted to the frame for maintaining a  
18 collapsed orientation and an expanded orientation of the stand relative to the frame;  
19 and  
20                   a pair of wheels rotatably connected to the frame proximate to the top  
21 end of the first pair of legs;  
22                   wherein an expanded orientation of the stand is defined by the top end  
23 of the second pair of legs being oriented at the second end of the frame and the  
24 bottom end of the second pair of legs are oriented outboard of the first longitudinal  
25 frame end to provide stable support to the power tool, the second pair of legs  
26 converge towards the first pair of legs as the sliding members are slid from the  
27 second longitudinal frame end to the first longitudinal frame end and the first and  
28 second pairs of legs are pivoted to an orientation parallel with the frame for  
29 providing a compact collapsed stand that is locked relative to the frame by the  
30 locking member and utilized by a user for transporting the power tool upon the pair  
31 of wheels.